MEMORANDUM

FROM: Anna Treinies

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TO: Gary Miller

Project Manager, Superfund ARK/TX Program Management Section

RE: Comments on the Sampling and Analysis Plan, RI/FS Workplan and QAPP,

Gulfco Marine Maintenance Site, Freeport, Texas

Volume 1 - Sampling and Analysis Plan

Section 2.4 - The RI/FS Work Plan should look at a broad range of potential constituents prior to narrowing down to a list of site wide chemicals of interest (COIs). The term COI implies a narrow list of suspected site contaminants rather than the broader range of sampling analytes required in this sampling effort. Please clearly define the term and provide a complete list of COI's or modify the terminology. The preferred terms [as defined in Risk Assessment Guidance Document for Superfund (RAGS)] are chemicals of potential concern (COPC) and chemicals of concern (COC).

Section 3.8 and Section 3.9 Background Samples - The background sediment and fish tissue samples appear to be located next to a barge slip. This is not an appropriate location to establish a background sample as it may detect site related contamination specific to that slip area. It would be appropriate to take samples in the canal down stream or up stream of the barge slip rather than right next to the barge slip (See Figure 10).

Table 2 - Please explain the logic used in the decision to sample only metals and VOC's in the following areas: Welding Area and the Former Gasoline Storage Tank Area. In addition, please explain the type of chemical analysis planned for the groundwater sample in the Former Product Storage Tank Area. Table 2 indicates that one sample will be taken but the type of analysis is not provided. Are there also grid samples with a full list of analytes planned for these areas?

Volume II - Sampling and Analysis Plan (QAPP) No Comments

Volume III - Remedial Investigation and Feasibility Study (RI/FS) Work Plan

Section 3.3 Conceptual Site Model There is agreement that the area to the North of Marlin Road is not utilized to the same extent that the area South of Marlin Road. But a trespasser only scenario for the area North of Marlin road is not appropriate. The industrial worker scenario / construction scenario should still be used in this area because the use of this land should also address potential future exposure scenarios.

Section 4.2 Work Plan Approach I have some concerns with the Triad approach (field

analysis being used for the risk assessment). What are the detection limits and data quality standards for the field screening? If the field screening data is being used for the risk assessment it must be able to meet the QA/QC standards and meet the required detection limits.

Section 5.6.3 Subtask 6.3: Soil Investigation

Subsection C (**Page 28**) - Lot 21 was used for sandblasting as well as barge repair in the dry dock area. Therefore EPA provided feedback in the August 4, 2005 Scoping Meeting to conduct a full suite analysis for this area. The 1 inch samples taken along the fence line were to be analyzed for metal only but all other samples in Lot 21 should include the full range of potential constituents. The historic use of this area for barge repair and sandblasting activities leaves the potential for a wide range of chemical releases in the area. The soil investigation should not be limited to metals only in this area.

Subsection G (Page 29) Any constituents detected will be carried forward into the baseline risk assessment regardless of how it compares to the background value. It is EPA's policy to address background issues in the Baseline Risk Assessment rather than remove the constituent in the risk screening phase.

Section 5.6.8 Subtask 6.8: Fish Tissue Investigation (Page 36)

The statement is made that fish tissue will be sampled for sediment samples above the sample quantitation limit (SQL). This is acceptable only if the SQL is low enough to be compared to the appropriate screening values. Additionally, a comparison to background concentration levels should not be used to justify the removed of potential constituents of concern in fish tissue. Background considerations can be addressed when a complete data set is available. The recommended background collection site does not appear to be reflective of background levels in the general area because the proposed collection location is at another barge docking site.

Section 5.7.1 Human Health Risk Assessment

Risk Characterization (Page 40) - The sample size may preclude the use of the 95 percent upper confidence limit on the arithmetic mean for the fish/crab tissue sampling. Specifically, if three crab samples are collected it would not be appropriate to use an 95% UCL for the exposure point concentration in the risk assessment.

Table 12 - Potential Source Areas and Associated Chemicals of Interest

- The welding area encompasses a large area with potentially multiple historic uses. This area should be characterized with the full list of COPCs to account for uncertainty. If there is a smaller area associated with welding, it may be appropriate analyzed for metals and VOCs in this smaller area.
- Lot 21 should be analyzed for the full suite of COPC's rather than just for metals. This area should include samples for a general characterization of the area and a subset of samples along the fence line (1 inch samples) to determine if dust from the sandblasting operation is migrating offsite. There is the potential of other constituents of concern in the dry dock area.

Table 14 and Table 15 - The screening values should be the same for the South area soils and

the north area soils. The appropriate screening values for human health are the industrial MSSL's. Any site specific scenarios are incorporated in the Baseline Risk Assessment rather than in the screening phase of the risk assessment.

Table 17 - Preliminary Screening Values for Groundwater

The MCL (or an alternate screening value) should be included as a potential preliminary screening value.

Table 19 - Preliminary Screening Values for Sediment

There is no screening value provided to address potential human health concerns.

Figure 6 and Figure 7 -

- The human health exposure scenario should be consistent on the North and South side of the property. Future exposure scenarios on the North side of the facility can not be limited to trespassers. If the property is sold the industrial exposure scenario may apply to this area in the future and therefore should be addressed in the same manor as the South side of the facility.
- The purpose of the CMS is to describe the pathways that will be evaluated in the risk assessment not indicate which pathways are indeterminate due to limited data. The CMS should address both the currently listed completed pathways as well as the indeterminate pathways (as data gaps are filled these pathways should be evaluated).
- Contact with soil should be one of the primary media of potential exposure (contaminated soil should be listed as a release mechanism).
- The air pathway does not address the potential for vapor intrusion.

Figure 10 - Site Characterization Process Flow Chart

The process flow chart indicates that the initial round of sampling will be scaled back to only those constituents listed as a COI for each area. There are a few areas in which the COI list may need to be revisited to incorporated earlier recommendations for the suite of constituents to be analyzed. Specifically, discussions during the scoping meetings indicated that the full suite of constituents would be evaluated on a grid pattern in addition to area specific samples looking for specific COI. In areas like the welding area, it does not appear that any grid samples will be collected. This is a fairly large area and therefore should not be limited to only addressing metals and VOCs. There are other potential historic releases to an area of this size.